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EXAMINER

BELL, MELTIN

ART UNIT

PAPER NUMBER

2121

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,427

Applicant(s)

HIRA ET AL.

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/8/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/923,427** filed 08/08/01.

Claims 1-13 have been examined.

Priority

Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

Acknowledgment is made of applicant's claim for foreign priority based on an application #2000-278674 filed in Japan on **9/8/00**.

Information Disclosure Statement

Applicant is respectfully reminded of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's application or thereafter.

The information disclosure statement filed 10/3/01 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because of missing or inaccurate information in the listing:

- The month and year of publication for both references (JP-A-11-345261, JP-A-9-251385) are missing.

- The Nikkei Mechanical Edition document on page 3, lines 15-18 isn't included.

It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Drawings

The United States Patent and Trademark Office of Draftsperson's Patent Drawings Review have reviewed the formal drawings. They are objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated on the Form PTO-948, Notice of Draftsperson's Patent Drawing Review.

The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the drawings.

The drawings are objected to because:

- The problem case database described on page 10, lines 14-18 hasn't necessarily been searched at step 604 in Fig. 6. A different box functional description with arrows from 603 and 606 to 604 may be used to represent simultaneous display of information from 2 source databases.

- The "No." suggested on page 14, line 9 is missing from Fig. 11, item 201.
- The "morphologic observation" suggested on page 17, lines 11-12 is missing from Fig. 16.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities:

- Fig. 2 suggests
 - attendant information 407 on page 8, lines 18 and 22 should be attendant information concerned with solution 407.
 - solution rule 404 on page 9, line 10 should be solution rule No. 404.
- Fig. 5 suggests desired-to-improve parameter 502 on page 9, line 19 should be improved parameter 502.
- Fig. 4 suggests (rule of parameter change) on page 11, lines 21-22 should be (rule of changing condensed condition).
- Fig. 1 suggests 105 should be 106 on page 11, line 23.
- Fig. 9 suggests step 706 should be mentioned on page 13, lines 15-19.

- The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: Meta and Case Database Distributed Information System and Method Implementing Rule Based Solutions to Customer and Company Specific Engineering Problems.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The invention as disclosed in claim 1 is directed to non-statutory subject matter. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility.

As a method, claim 1 offers abstract ideas (e.g. "examples", "database", "information", "problem", "solution", "result") that are also not applied in the technological arts. Abstract ideas and their manipulation constitute "descriptive material" that is not patentable, *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759 and *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, respectively. If the abstract ideas of claim 1 represented functional descriptive material consisting of data structures and computer programs which impart functionality when employed as a computer component (recorded on some computer readable medium), they become structurally and

functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. For examples,

- *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) offers claim to data structure stored on a computer readable medium that increases computer efficiency held statutory and
- *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 offers product-by-process claim to computer having a specific data structure stored in memory also held statutory while
- *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 offers claim to a data structure *per se* held nonstatutory.

Because the claim is not claimed to be practiced on a computer and/or stored on a computer readable medium, it is not limited to practical applications in the technological arts. Specifically, the claim is a method without any particular practical application, such as a program running on a computer and stored in a computer readable medium or memory. On that basis alone, the claim is clearly nonstatutory.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility. Claim 1 is also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

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Claim Rejections - 35 USC § 112

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Support for this 35 U.S.C. 112, first paragraph rejection comes from MPEP 2164.07(I)(A):

"As noted in *In re Fouche*, 439 F.2d 1237, 169 USPQ 429 (CCPA 1971), if "compositions are in fact useless, appellant's specification cannot have taught how to use them." 439 F.2d at 1243, 169 USPQ at 434. The examiner should make both rejections (i.e., a rejection under 35 U.S.C. 112, first paragraph and a rejection under 35 U.S.C. 101) where the subject matter of a claim has been shown to be nonuseful or inoperative. The 35 U.S.C. 112, first paragraph, rejection should indicate that because the invention as claimed does not have utility, a person skilled in the art would not be able to use the invention as claimed, and as such, the claim is defective under 35 U.S.C. 112, first paragraph."

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "metal" in line 1 of page 22. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by

Baker USPN 6,076,083 (Issued: June 13, 2000; Filed: August 21, 1996).

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Regarding claim 1:

Baker teaches,

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")
- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")

Regarding claim 3:

Baker teaches,

- the step of displaying a plurality of examples of solution searched out from said case database in order to urge the user to think up an idea for a new solution (column 6, lines 10-18, "One of the...in expert systems").

Regarding claim 11:

Baker teaches a recording medium (FIG. 3, item 202; column 8, lines 9-31, "According to the...a data base") that

- can be read by a computer, and that accepts data of a problem (FIG. 3, item 212; column 1, lines 24-26, "Computer based diagnostic/expert...many different areas") and
- provides a solution to said problem, said medium having a function to receive said data of said problem (column 8, lines 44-63, "According to a...to the fault"),
- a function to search storage device having solution rules stored in association with said data, and a function to extract a solution corresponding to the result of having searched for said solution rules (column 1, lines 45-67, "The earliest type...conditions grows large")

Regarding claim 12:

Baker teaches a recording medium (FIG. 3, item 202; column 8, lines 9-31, "According to the...a data base") that

- can be read by a computer, and that accepts data of a problem (FIG. 3, item 212; column 1, lines 24-26, "Computer based diagnostic/expert...many different areas") and
- provides a solution to said problem, said medium having a function to receive said data of said problem (column 8, lines 44-63, "According to a...to the fault"),
- a function to search either first storage device having solution rules stored in association with said data or second storage device having examples of solution in association with said problem, and a function to extract a solution corresponding to the result of having searched for said solution rules (FIG. 3, items 202, 208, 214; column 1, lines 45-67, "The earliest type...conditions grows large")

Regarding claim 13:

Baker teaches,

- said function to extract said solution corresponding to said solution rules has a function to search a content database having information of solutions associated with said solution rules (column 9, lines 40-67, "all matrix cells...configuration matches an"; column 10, lines 1-51, "instance, the cells...with that configuration")

Claim Rejections - 35 USC § 103

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation

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of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Baker* USPN 6,076,083 (June 13, 2000) in view of *Syeda-Mahmood* USPN 5,920,856 (July 6, 1999) and further in view of *Litwin et al* "Interoperability of Multiple Autonomous Databases" (September 1990).

Regarding claim 2:

The rejection of claim 1 is incorporated based on *Baker's* following teachings:

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")
- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")

Litwin et al teaches,

- shared access of autonomous databases (Abstract, "Database systems were...current research issues")

However, *Baker* and *Litwin et al* don't explicitly teach searching a meta database while *Syeda-Mahmood* teaches,

- searching a meta database including a rule extracted from actual examples (column 6, lines 47-59, "Reflecting the two-level...and indexing capabilities")
- the step of displaying a plurality of solution rules based on said meta rule searched out from said meta database in order to urge the user to think up an idea for a new solution (column 8, lines 13-56, "A central idea...as across images")

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for

- Effective data monitoring (*Baker*, column 7, lines 6-37, "It is another...of system operators")
- Intelligent selection of database sites (*Syeda-Mahmood*, column 4, lines 6-13, "A detailed design...multimedia database design")

- Efficient and consistent data management while maintaining privacy (*Litwin et al*, page 267, Introduction, paragraph 1, "Database systems were...privacy and efficiency")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Syeda-Mahmood* with *Baker* and *Litwin et al* to obtain the invention specified in claim 2, a method for providing information at an engineering portal site. The modification would have been obvious because one of ordinary skill in the art would have been motivated to apply the best information to the most appropriate locations in the problem-solving domain needing the data.

Regarding claim 4:

The rejection of claim 1 is incorporated based on *Baker's* following teachings:

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")
- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")

Litwin et al teaches,

- shared access of autonomous databases (Abstract, "Database systems were...current research issues")

However, *Baker* and *Litwin et al* don't explicitly teach searching a meta database while *Syeda-Mahmood* teaches,

- searching a meta database including a rule extracted from actual examples (column 6, lines 47-59, "Reflecting the two-level...and indexing capabilities")

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- the step of displaying a plurality of solution rules based on said meta rule searched out from said meta database in order to urge the user to think up an idea for a new solution (column 8, lines 13-56, "A central idea...as across images")

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for

- Effective data monitoring (*Baker*, column 7, lines 6-37, "It is another...of system operators")
- Intelligent selection of database sites (*Syeda-Mahmood*, column 4, lines 6-13, "A detailed design...multimedia database design")
- Efficient and consistent data management while maintaining privacy (*Litwin et al*, page 267, Introduction, paragraph 1, "Database systems were...privacy and efficiency")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Syeda-Mahmood* with *Baker* and *Litwin et al* to obtain the invention specified in claim 4, a method for providing information at an engineering portal site. The modification would have been obvious because one of ordinary skill in the art would have been motivated to apply the best information to the most appropriate locations in the problem-solving domain needing the data.

Regarding claim 5:

The rejection of claim 1 is incorporated based on *Baker's* following teachings:

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")

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- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")
- the step of displaying a plurality of solution rules, a plurality of examples of solution searched out from said case database, and a plurality of contents that offer said solution examples in order to urge the user to think up an idea for a new solution (column 9, lines 64-67, "each time an...configuration matches an"; column 10, lines 1-15, "instance, the cells...given observed instance")

Litwin et al teaches,

- shared access of autonomous databases (Abstract, "Database systems were...current research issues")

However, *Baker* and *Litwin et al* don't explicitly teach searching a meta database while *Syeda-Mahmood* teaches,

- searching a meta database including a rule extracted from actual examples (column 6, lines 47-59, "Reflecting the two-level...and indexing capabilities")
- the step of displaying a plurality of solution rules based on said meta rule searched out from said meta database in order to urge the user to think up an idea for a new solution (column 8, lines 13-56, "A central idea...as across images")

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for

- Effective data monitoring (*Baker*, column 7, lines 6-37, "It is another...of system operators")

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- Intelligent selection of database sites (*Syeda-Mahmood*, column 4, lines 6-13, "A detailed design...multimedia database design")
- Efficient and consistent data management while maintaining privacy (*Litwin et al*, page 267, Introduction, paragraph 1, "Database systems were...privacy and efficiency")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Syeda-Mahmood* with *Baker* and *Litwin et al* to obtain the invention specified in claim 5, a method for providing information at an engineering portal site. The modification would have been obvious because one of ordinary skill in the art would have been motivated to apply the best information to the most appropriate locations in the problem-solving domain needing the data.

Regarding claim 6:

The rejection of claim 1 is incorporated based on *Baker's* following teachings:

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")
- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")
- the step of displaying a plurality of solution rules, a plurality of examples of solution searched out from said case database, and a plurality of contents that offer said solution examples in order to urge the user to think up an idea for a new solution (column 9, lines 64-67, "each time an...configuration matches an"; column 10, lines 1-15, "instance, the cells...given observed instance")

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Syeda-Mahmood teaches,

- searching a meta database including a rule extracted from actual examples (column 6, lines 47-59, "Reflecting the two-level...and indexing capabilities")
- the step of displaying a plurality of solution rules based on said meta rule searched out from said meta database in order to urge the user to think up an idea for a new solution (column 8, lines 13-56, "A central idea...as across images")

However, *Baker* and *Syeda-Mahmood* don't explicitly teach customers and company databases while *Litwin et al* teaches,

- shared access of autonomous databases (Abstract, "Database systems were...current research issues")
- in order that each of customers can be offered customized solutions and contents, a company database is provided that is concerned with companies which said customers belong to, and searched for each customer's information, and problems and solutions supposed for each customer are enumerated by use of said search result (page 270, section 1.2, left column, "Videotex databases are...databases for buy-"; page 270, section 1.2, right column, "ing or selling...soon be supported"; page 275, section 2.1.4, Example 1, right column, last paragraph, sentence 2-6, "The enumeration of...for example, open_date,"; page 276, section 2.1.4, Example 1, left column, first paragraph, sentence 1, "then its value...refreshed as well")

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for

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- Effective data monitoring (*Baker*, column 7, lines 6-37, "It is another...of system operators")
- Intelligent selection of database sites (*Syeda-Mahmood*, column 4, lines 6-13, "A detailed design...multimedia database design")
- Efficient and consistent data management while maintaining privacy (*Litwin et al*, page 267, Introduction, paragraph 1, "Database systems were...privacy and efficiency")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Syeda-Mahmood* with *Baker* and *Litwin et al* to obtain the invention specified in claim 6, a method for providing information at an engineering portal site. The modification would have been obvious because one of ordinary skill in the art would have been motivated to apply the best information to the most appropriate locations in the problem-solving domain needing the data.

Regarding claim 7:

The rejection of claim 1 is incorporated based on *Baker's* following teachings:

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")
- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")
- the step of displaying a plurality of solution rules, a plurality of examples of solution searched out from said case database, and a plurality of contents that offer said solution examples in order to urge the user to think up an idea for a new solution (column 9,

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lines 64-67, "each time an...configuration matches an"; column 10, lines 1-15, "instance, the cells...given observed instance")

Syeda-Mahmood teaches,

- searching a meta database including a rule extracted from actual examples (column 6, lines 47-59, "Reflecting the two-level...and indexing capabilities")

- the step of displaying a plurality of solution rules based on said meta rule searched out from said meta database in order to urge the user to think up an idea for a new solution (column 8, lines 13-56, "A central idea...as across images")

However, *Baker* and *Syeda-Mahmood* don't explicitly teach customers and company databases while *Litwin et al* teaches,

- shared access of autonomous databases (Abstract, "Database systems were...current research issues")

- in order that each of customers can be offered customized solutions and contents, a company database is provided that is concerned with companies which said customers belong to, and a problem from each customer is easily solved by displaying said contents selected according to the type of said customers (page 270, section 1.2, left column, "Videotex databases are...databases for buy-"; page 270, section 1.2, right column, "ing or selling...soon be supported")

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for

- Effective data monitoring (*Baker*, column 7, lines 6-37, "It is another...of system operators")

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- Intelligent selection of database sites (*Syeda-Mahmood*, column 4, lines 6-13, "A detailed design...multimedia database design")
- Efficient and consistent data management while maintaining privacy (*Litwin et al*, page 267, Introduction, paragraph 1, "Database systems were...privacy and efficiency")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Syeda-Mahmood* with *Baker* and *Litwin et al* to obtain the invention specified in claim 7, a method for providing information at an engineering portal site. The modification would have been obvious because one of ordinary skill in the art would have been motivated to apply the best information to the most appropriate locations in the problem-solving domain needing the data.

Regarding claim 8:

Syeda-Mahmood teaches,

- means for accepting data about a problem sent from a demander who requests for providing an information service (FIG. 1, item 2; FIGS. 3-4)
- means for transmitting said accepted data to an information providing server (FIG. 2)
- means for transmitting said search result from said information providing server to said demander (FIGS. 2 and 4, item 26)
- means for receiving said search result sent from said information service providing server and supplying said result to the outside (FIG. 3, item 15)

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However, *Syeda-Mahmood* doesn't explicitly teach searching a solution database while *Baker* teaches,

- a case database regarding a solution to a problem in response to said problem from the user (column 2, lines 1-23, "An alternative to...of these systems")
- displaying said solution to said problem from the user by use of said search result (column 8, lines 9-31, "According to the...a data base")
- means for executing processes of searching a solution database having data of solution rules by use of said data transmitted from said demander (FIG. 4, item 25)

Motivation – The portions of the claimed system would have been a highly desirable feature in this art for

- Effective data monitoring (*Baker*, column 7, lines 6-37, "It is another...of system operators")
- Intelligent selection of database sites (*Syeda-Mahmood*, column 4, lines 6-13, "A detailed design...multimedia database design")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Syeda-Mahmood* with *Baker* to obtain the invention specified in claim 8, an information providing service. The modification would have been obvious because one of ordinary skill in the art would have been motivated to apply the best information to the most appropriate locations.

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Regarding claim 9:

The rejection of claim 8 is incorporated. Claim 9's further limitations are taught in

Syeda-Mahmood:

- said data accepting means receives data to be improved (column 8, lines 58-67, "The model proposes ... instead of a"; column 9, lines 1-11, "simple look up...region isolation methods")

Therefore, claim 9 is rejected under the same rationale as claim 8.

Regarding claim 10:

The rejection of claim 9 is incorporated. Therefore, claim 10 is rejected under the same rationale as claim 9.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- *Baker*; USPN 6,076,083

- *Syeda-Mahmood*; USPN 5,920,856

- *Litwin et al*; Interoperability of Multiple Autonomous Databases; ACM Computing Surveys; CSUR; Vol. 22, Iss. 3; September 1990; pp 267-293

- *Syeda-Mahmood*; USPN 5,983,218; Multimedia Database for Use Over Networks

- *Johnson, Jr. et al*; Survey of Software Tools for Evaluating Reliability, Availability, and Serviceability; ACM Computing Surveys; Vol. 2, Iss. 4; December 1988; pp 227-269

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- *Smith et al*; Complex System Design Utilizing a Meta-Data Dictionary; IEEE International Conference on Systems, Man and Cybernetics; 'Intelligent Systems for the 21st Century'; Vol.2; 22-25 October 1995; pp 1831-1836
- *Hajek et al*; A generic task approach to a real time nuclear power plant fault diagnosis and advisory system; Proceedings of the IEEE International Workshop on Artificial Intelligence for Industrial Applications; 25-27 May 1988; pp 154-160
- *Imai et al*; Color coordination system on Case Based Reasoning system using neural network; 1999 IEEE International Conference on Systems, Man, and Cybernetics; Vol. 6; 12-15 Oct. 1999 ; pp 224 - 229
- *Rong et al*; Storage and retrieval of solutions in the design of electromagnetic devices; IEEE Transactions on Magnetics; Vol. 30, Iss. 5; September 1994; pp 3648-3651
- *Radcliffe*; The insurance industry's use of databases to prevent and detect fraud, and improve recoveries; European Convention on Security and Detection; 16-18 May 1995; pp 216-224
- *Dewey et al*; An information architecture for physiological models, clients and databases; Proceedings of the 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society; Vol. 2; 25-28 Oct. 2001; pp 2042-2046
- *Yamada et al*; JPN 09251385A; Problem Solution Support Method/Device
- *Terahama et al*; JPN 08212232A; Case database searching method – involves displaying searched example of high priority according to priority rule stored in memory device

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Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 703-305-0362.

This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anil Khatri, can be reached on 703-305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MB / *M.N.*



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